

SEQUENCE LISTING

<110> Bettiol, Jean-Luc P. Thoen, Christiaan AJK <120> Detergent Compositions Comprising a Mannanase and a Soil Release Polymer <130> Mannanase and soil release polymer <140> 09/485,650 <141> 2000-02-14 <150> PCT/US98/12027 <151> 1998-06-10 <160> 6 <170> PatentIn Ver. 2.1 <210> 1 <211> 1482 <212> DNA <213> Bacillus sp. <400> 1 atgaaaaaaa agttatcaca gatttatcat ttaattattt gcacacttat aataagtgtg 60

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<210> 2

<211> 493

<212> PRT

<213> Bacillus sp.

<400> 2

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Ser Thr Gly Phe Tyr Val Asp Gly Asn Thr Leu Tyr Asp Ala Asn Gly
35 40 45

Gln Pro Phe Val Met Arg Gly Ile Asn His Gly His Ala Trp Tyr Lys
50 55 60

Asp Thr Ala Ser Thr Ala Ile Pro Ala Ile Ala Glu Gln Gly Ala Asn 65 70 75 80

Thr Ile Arg Ile Val Leu Ser Asp Gly Gly Gln Trp Glu Lys Asp Asp 85 90 95

Ile Asp Thr Ile Arg Glu Val Ile Glu Leu Ala Glu Gln Asn Lys Met
100 105 110

Val Ala Val Val Glu Val His Asp Ala Thr Gly Arg Asp Ser Arg Ser 115 120 125

Asp Leu Asn Arg Ala Val Asp Tyr Trp Ile Glu Met Lys Asp Ala Leu 130 135 140

Gly Ser Trp Asp Gly Ser Ala Trp Ala Asp Gly Tyr Ile Asp Val Ile 165 170 175

Pro Lys Leu Arg Asp Ala Gly Leu Thr His Thr Leu Met Val Asp Ala 180 185 190

Ala Gly Trp Gly Gln Tyr Pro Gln Ser Ile His Asp Tyr Gly Gln Asp

Val Phe Asn Ala Asp Pro Leu Lys Asn Thr Met Phe Ser Ile His Met
210 220

205

- Tyr Glu Tyr Ala Gly Gly Asp Ala Asn Thr Val Arg Ser Asn Ile Asp 225 230 235 240
- Arg Val Ile Asp Gln Asp Leu Ala Leu Val Ile Gly Glu Phe Gly His 245 250 255
- Arg His Thr Asp Gly Asp Val Asp Glu Asp Thr Ile Leu Ser Tyr Ser 260 265 270
- Glu Glu Thr Gly Trp Leu Ala Trp Ser Trp Lys Gly Asn Ser 275 280 285
- Thr Glu Trp Asp Tyr Leu Asp Leu Ser Glu Asp Trp Ala Gly Gln His 290 295 300
- Leu Thr Asp Trp Gly Asn Arg Ile Val His Gly Ala Asp Gly Leu Gln 305 310 315 320
- Glu Thr Ser Lys Pro Ser Thr Val Phe Thr Asp Asp Asn Gly Gly His 325 330 335
- Pro Glu Pro Pro Thr Ala Thr Thr Leu Tyr Asp Phe Glu Gly Ser Thr 340 345 350
- Gln Gly Trp His Gly Ser Asn Val Thr Gly Gly Pro Trp Ser Val Thr 355 360 365
- Glu Trp Gly Ala Ser Gly Asn Tyr Ser Leu Lys Ala Asp Val Asn Leu 370 380
- Thr Ser Asn Ser Ser His Glu Leu Tyr Ser Glu Gln Ser Arg Asn Leu 385 390 395 400
- His Gly Tyr Ser Gln Leu Asn Ala Thr Val Arg His Ala Asn Trp Gly
 405 410 415
- Asn Pro Gly Asn Gly Met Asn Ala Arg Leu Tyr Val Lys Thr Gly Ser 420 425 430
- Asp Tyr Thr Trp His Ser Gly Pro Phe Thr Arg Ile Asn Ser Ser Asn 435 440 445
- Ser Gly Thr Thr Leu Ser Phe Asp Leu Asn Asn Ile Glu Asn Ser His

450 455 460

His Val Arg Glu Ile Gly Val Gln Phe Ser Ala Ala Asp Asn Ser Ser 465 470 475 480

Gly Gln Thr Ala Leu Tyr Val Asp Asn Val Thr Leu Arg
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<212> DNA

<213> Bacillus sp.

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<211> 468

<212> PRT

<213> Bacillus sp.

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Arg His Thr Asp Gly Asp Val Asp Glu Asp Thr Ile Leu Ser Tyr Ser

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Glu Glu Thr Gly Thr Gly Trp Leu Ala Trp Ser Trp Lys Gly Asn Ser 275 280 285

Thr Glu Trp Asp Tyr Leu Asp Leu Ser Glu Asp Trp Ala Gly Gln His 290 295 300

Leu Thr Asp Trp Gly Asn Arg Ile Val His Gly Ala Asp Gly Leu Gln 305 310 315 320

Glu Thr Ser Lys Pro Ser Thr Val Phe Thr Asp Asp Asn Gly Gly His
325 330 335

Pro Glu Pro Pro Thr Ala Thr Thr Leu Tyr Asp Phe Glu Gly Ser Thr 340 345 350

Gln Gly Trp His Gly Ser Asn Val Thr Gly Gly Pro Trp Ser Val Thr 355 360 365

Glu Trp Gly Ala Ser Gly Asn Tyr Ser Leu Lys Ala Asp Val Asn Leu 370 375 380

Thr Ser Asn Ser Ser His Glu Leu Tyr Ser Glu Gln Ser Arg Asn Leu 385 390 395 400

His Gly Tyr Ser Gln Leu Asn Ala Thr Val Arg His Ala Asn Trp Gly
405 410 415

Asn Pro Gly Asn Gly Met Asn Ala Arg Leu Tyr Val Lys Thr Gly Ser 420 425 430

Asp Tyr Thr Trp His Ser Gly Pro Phe Thr Arg Ile Asn Ser Ser Asn 435 440 445

Ser Gly Thr Thr Leu Ser Phe Asp Leu Asn Asn Ile Glu Asn Ile Ile 450 455 460

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<211> 1029

<212> DNA

<213> Bacillus sp.

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<210> 6

<211> 362

<212> PRT

<213> Bacillus sp.

<400> 6

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His Leu Pro Asn Arg Thr Glu Asn Arg Val Leu Ser Gly Ala Phe Gly 50 55 60

Gly Tyr Ser His Asp Thr Phe Ser Met Ala Glu Ala Asp Arg Ile Arg 65 70 75 80

Ser Ala Thr Gly Gln Ser Pro Ala Ile Tyr Gly Cys Asp Tyr Ala Arg 85 90 95

Gly Trp Leu Glu Thr Ala Asn Ile Glu Asp Ser Ile Asp Val Ser Cys
100 105 110

Asn Gly Asp Leu Met Ser Tyr Trp Lys Asn Gly Gly Ile Pro Gln Ile

115	120	125

Ser	Leů 130	His	Leu	Ala	Asn	Pro 135	Ala	Phe	Gln	Ser	Gly 140	His	Phe	Lys	Thi
Pro 145	Ile	Thr	Asn	Asp	Gln 150	Tyr	Lys	Asn	Ile	Leu 155	Asp	Ser	Ala	Thr	Alá 160
Glu	Gly	Lys	Arg	Leu 165	Asn	Ala	Met	Leu	Ser 170	Lys	Ile	Ala	Asp	Gly 175	Let
Gln	Glu	Leu	Glu 180	Asn	Gln	Gly	Val	Pro 185	Val	Leu	Phe	Arg	Pro 190	Leu	His
Glu	Met	Asn 195	Gly	Glu	Trp	Phe	Trp 200	Trp	Gly	Leu	Thr	Ser 205	Tyr	Asn	Glr
Lys	Asp 210	Asn	Glu	Arg	Ile	Ser 215	Leu	Tyr	Lys	Gln	Leu 220	Tyr	Lys	Lys	Ile
Tyr 225	His	Tyr	Met	Thr	Asp 230	Thr	Arg	Gly	Leu	Asp 235	His	Leu	Ile	Trp	Val 240
Tyr	Ser	Pro	Asp	Ala 245	Asn	Arg	Asp	Phe	Lys 250	Thr	Asp	Phe	Tyr	Pro 255	Gly
Ala	Ser	Tyr	Val 260	Asp	Ile	Val	Gly	Leu 265	Asp	Ala	Tyr	Phe	Gln 270	Asp	Ala
Tyr	Ser	Ile 275	Asn	Gly	Tyr	Asp	Gln 280	Leu	Thr	Ala	Leu	Asn 285	Lys	Pro	Ph∈
Ala	Phe 290	Thr	Glu	Val	Gly	Pro 295	Gln	Thr	Ala	Asn	Gly 300	Ser	Phe	Asp	Tyr
Ser 305	Leu	Phe	Ile	Asn	Ala 310	Ile	Lys	Gln	Lys	Tyr 315	Pro	Lys	Thr	Ile	Tyr 320
Phe	Leu	Ala	Trp	Asn 325	Asp	Glu	Trp	Ser	Ala 330	Ala	Val	Asn	Lys	Gly 335	Ala
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